

Abstract of Disclosure:

Without of affect of sulfur in fuel, NOx in exhaust gas is decomposed completely using discharge and low temperature of 300 C degree, to establish technique for generating NO₂ for necessary to oxidize a particle substance in a real time. The generated NO₂ and ozone and active oxygen generated in oxygen atmosphere are used an oxidation agent the particle substance is decomposed completely using discharge and low temperature of 300 C degree. As to NOx in exhaust gas, No is decomposed completely using a thin and narrow wire shape bear wire and NO₂ for necessary to the particle substance is generated and is processed in response to operation condition of the engine in low temperature of 300 C degree.

[Selection Figure] Fig. 1